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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,944

12/04/2003

Yusuke Ichikawa

17295

7378

23389

7590

03/04/2008

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EXAMINER

YABUT, DIANE D

ART UNIT

PAPER NUMBER

3734

MAIL DATE

DELIVERY MODE

03/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/727,944	<b>Applicant(s)</b> ICHIKAWA, YUSUKE	
	<b>Examiner</b> DIANE YABUT	<b>Art Unit</b> 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/21/2007 has been entered.

### ***Claim Objections***

2. Claims 2-4, 6-11, and 13-19 are objected to because of the following informalities: The above claims begin as "An ultrasonic" and should rather read --The ultrasonic--. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hoyns** (U.S. Patent No. **5,759,154**) in view of **Ouchi** (U.S. Patent No. **6,238,336**) and **Masatoshi** (**JP 11076254**).

Claims 1-19: Hoyns discloses a needle **10** for being inserted into tissue within the body cavity, which includes a plurality of staggered-array or radially-patterned recesses **114** over a predetermined range on the surface of the tip portion of the needle thereof from the tip thereof on the back side of a cutting-tip portion (Figures 1, 1A, 6; col. 4, lines 1-4). Hoyns also discloses the multiple recesses being formed using a laser apparatus or an electric discharge machining apparatus under positioning control set so that the recesses have no adverse effects on a cutting-tip portion forming the needle tube due to overlap of the recesses and the cutting-tip portion (col. 6, lines 50-58 and col. 7, lines 52-61).

Hoyns discloses the claimed device except for the needle being a tube and having annular-shaped recesses which are formed at positions such that an overlap of the recesses and the cutting-tip portion does not occur, as well as having a sheath being inserted into a treatment tool insertion channel of an ultrasonic endoscope wherein the needle tube is inserted into tissue within the body cavity through the sheath,

and a tube portion formed in the shape of a tube at the rear end of the puncturing portion of the needle, with the tube-shaped portion formed as an extension of the tube portion.

Ouchi teaches an ultrasonic endoscope with a sheath **100** which is inserted into a treatment tool insertion channel **13** of the ultrasonic endoscope and a needle tube **101** for being inserted into tissue within the body cavity through the sheath (Figure 1, col. 4, lines 15-20). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a ultrasonic endoscope and a needle tube, as taught by Ouchi, to Hoyns since it was known in the art that an injection or aspiration needle can be properly and accurately penetrated into a target site while using an ultrasonic endoscope that accurately monitors the state of penetration (col. 1, lines 50-54).

Ouchi also teaches a tube portion formed in the shape of a tube at the rear end of the puncturing portion of needle **101**, and a tube-shaped portion formed as an extension of the tube portion (Figure 1, col. 4, lines 15-20). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a tube portion in the needle, as taught by Ouchi, to Hoyns since it was known in the art that aspiration and injection needles, or tubular needles, are commonly used with ultrasonic endoscopes.

Masatoshi teaches an ultrasonic needle tube **1** with annular-shaped recesses **30** (Figures 4-5). It would have been obvious to one of ordinary skill in the art at the time of invention to provide annular-shaped recesses being formed at positions such that overlap of the recesses and the cutting-tip portion does not occur, as taught by

Masatoshi, to Hoyns in order to project the positioning of the needle under an ultrasonic image clearly, safely, and reliably while preventing interference of the piercing function.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIANE YABUT whose telephone number is (571)272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diane Yabut/

Examiner, Art Unit 3734

/Todd E Manahan/

Supervisory Patent Examiner, Art Unit 3731